

Latitude observed,	-	-	38° 22'
Longitude by time keepers,	-	-	144 31½
Cape Schanck,	-	-	S. 68° E.
The rocky point, distant 6 or 7 miles,	-	-	N. 48 E.
Highest of two inland peaks,	-	-	N. 15 W.
A square-topped hill near the shore,	-	-	N. 28 W.
Extr. of the high land towards C. Otway,	-	-	S. 56 W.

1802.
April.
Monday 26.

On the west side of the rocky point there was a small opening, with breaking water across it; however, on advancing a little more westward the opening assumed a more interesting aspect, and I bore away to have a nearer view. A large extent of water presently became visible within side; and although the entrance seemed to be very narrow, and there were in it strong rippings like breakers, I was induced to steer in at half past one; the ship being close upon a wind and every man ready for tacking at a moment's warning. The soundings were irregular between 6 and 12 fathoms, until we got four miles within the entrance, when they shoaled quick to 2¾. We then tacked; and having a strong tide in our favour, worked to the eastward between the shoal and the rocky point, with 12 fathoms for the deepest water. In making the last stretch from the shoal, the depth diminished from 10 fathoms quickly to 3; and before the ship could come round, the flood tide set her upon a mud bank, and she stuck fast. A boat was lowered down to sound; and finding the deep water lie to the north-west, a kedge anchor was carried out; and having got the ship's head in that direction, the sails were filled and she drew off into 6 and 10 fathoms; and it being then dark, we came to an anchor.

The extensive harbour we had thus unexpectedly found I supposed must be Western Port, although the narrowness of the entrance did by no means correspond with the width given to it by Mr. Bass. It was the information of captain Baudin, who had coasted along from thence with fine weather, and had found no inlet of any kind, which induced this supposition; and the very

1802.
April.
Tuesday 27. great extent of the place, agreeing with that of Western Port, was in confirmation of it. This, however, was not Western Port, as we found next morning; and I congratulated myself on having made a new and useful discovery; but here again I was in error. This place, as I afterwards learned at Port Jackson, had been discovered ten weeks before by lieutenant John Murray, who had succeeded captain Grant in the command of the *Lady Nelson*. He had given it the name of PORT PHILLIP, and to the rocky point on the east side of the entrance, that of *Point Nepean*.

Our situation was found in the morning to be near two miles from the south shore, and the extreme towards Point Nepean bore N. 83° W., two leagues. About three miles to the north-by-west were some dry rocks, with bushes on them, surrounded with mud flats; and they appeared to form a part of the same shoal from which we had three times tacked in $2\frac{1}{2}$ and 3 fathoms. The mud bank where the ship had grounded, is distinct from the middle shoal; but I am not certain that it is so from the south shore, from which it is one mile distant. The Bluff Mount (named *Arthur's Seat* by Mr. Murray, from a supposed resemblance to the hill of that name near Edinburgh,) bore S. 76° E.; but from thence the shore trended nothward so far, that the land at the head of the port could not be seen, even from aloft. Before proceeding any higher with the ship, I wished to gain some knowledge of the form and extent of this great piece of water; and *Arthur's Seat* being more than a thousand feet high and near the water side, presented a favourable station for that purpose.

After breakfast I went away in a boat, accompanied by Mr. Brown and some other gentlemen, for the *Seat*. It was seven or eight miles from the ship; and in steering nearly a straight course for it, we passed over the northern skirt of the shoal where the ship had touched; but afterwards had from 7 to 5 fathoms nearly to the shore. Having observed the latitude there from an artificial horizon, I ascended the hill; and to my surprise found the port so extensive,

that even at this elevation its boundary to the northward could not be distinguished. The western shore extended from the entrance ten or eleven miles in a northern direction, to the extremity of what, from its appearance, I called *Indented Head*; beyond it was a wide branch of the port leading to the westward, and I suspected might have a communication with the sea; for it was almost incredible, that such a vast piece of water should not have a larger outlet than that through which we had come.

1802.
April.
Tuesday 27.

I took an extensive set of bearings from the clearest place to be found on the north-western, bluff part of the hill; and we afterwards walked a little way back upon the ridge. From thence another considerable piece of water was seen, at the distance of three or four leagues; it seemed to be mostly shallow; but as it appeared to have a communication with the sea to the south, I had no doubt of its being Mr. Bass' Western Port.

Arthur's Seat and the hills and vallies in its neighbourhood, were generally well covered with wood; and the soil was superior to any upon the borders of the salt water, which I have had an opportunity of examining in Terra Australis. There were many marks of natives, such as deserted fire places and heaps of oyster shells; and upon the peninsula which forms the south side of the port, a smoke was rising, but we did not see any of the people. Quantities of fine oysters were lying upon the beaches, between high and low water marks, and appeared to have been washed up by the surf; a circumstance which I do not recollect to have observed in any other part of this country.

We returned on board at dusk in the evening; and at daylight the anchor was weighed with the intention of coasting round the port with the ship. The wind was at north-east, but the flood tide was in our favour; and having made a stretch toward the middle shoals, we tacked and ran east-south-east along their south side, until past eight; when the flood having ceased, we came to in 7 fathoms. At slack water in the afternoon we again steered east-

Wednes. 28.

1802.
April.
Wednes. 28. ward, but were soon obliged to anchor from want of wind; and I found that this slow mode of proceeding was not at all suited to the little time for which we had provisions remaining, besides that there was much probability of getting frequently aground; the plan of examining the port with the ship was therefore abandoned.

Thurs. 29. Having left orders with Mr. Fowler, the first lieutenant, to take the ship back to the entrance, I went in a boat early next morning with provisions for three days; in order to explore as much of the port as could be done in that time. Round the east end of the middle shoals I carried 6 and 7 fathoms; and keeping north-eastward, had 8 and 9 fathoms at a mile or more from the shore, and 4 close past the second rocky point above Arthur's Seat. The wind being at north-west, I was obliged to land behind some rocks more than two miles short of the third point, but walked to it with my surveying instruments. This was nine miles from the Seat, and the furthest part of the shore seen from thence; further on, the shore falls back more eastward, in long sandy beaches, and afterwards curves to the north-west; but it was lost to sight long before joining the land on the west side of the port. After taking angles and observing for the latitude and longitude, I rowed to windward for Indented Head, five leagues off. At the end of the first mile and a half the depth was 11 fathoms, but afterwards no bottom at 12, until within two miles of the western shore, where it was 9 fathoms. We landed at nine o'clock at night, near the uppermost part which had yet been seen.

Friday 30. In the morning, a fire was perceived two-hundred yards from the tent; and the Indians appeared to have decamped from thence on our landing. Whilst I was taking angles from a low point at the north-easternmost part of Indented Head, a party of the inhabitants showed themselves about a mile from us; and on landing there we found a hut with a fire in it, but the people had disappeared, and carried off their effects. I left some strips of cloth, of their favourite red colour, hanging about the hut; and proceeded westward along

the shore, to examine the arm of the port running in that direction.

1802.
April.
Friday 30.

Three natives having made their appearance abreast of the boat, we again landed. They came to us without hesitation, received a shag and some trifling presents with pleasure, and parted with such of their arms as we wished to possess, without reluctance. They afterwards followed us along the shore; and when I shot another bird, which hovered over the boat, and held it up to them, they ran down to the water side and received it without expressing either surprise or distrust. Their knowledge of the effect of fire arms I then attributed to their having seen me shoot birds when unconscious of being observed; but it had probably been learned from Mr. Murray.

At noon, I landed to take an observation of the sun, which gave $38^{\circ} 7' 6''$ for the latitude; my position being nearly at the northern extremity of Indented Head. Some bearings were taken from the brow of a hill a little way back; and after a dinner of which the natives partook, we left them on friendly terms, to proceed westward in our examination. The water became very shallow abreast of a sandy point, whence the shore trends nearly south-west; and there being no appearance of an opening to the sea this way, I steered across the western arm, as well to ascertain its depth as with the intention of ascending the hills lying behind the northern shore. Two of the peaks upon these hills had been set from the ship's deck at sunset of the 25th, at the distance of thirty-seven miles; and as their elevation must consequently be a thousand feet, or more, I expected to obtain from thence such a view of the upper parts of the port, as would render the coasting round it unnecessary.

The width of the western arm was found to be six miles; and the soundings across augmented regularly to 6 fathoms in mid-channel, and then decreased in the same way; but there was less than 3 fathoms at two miles from the northern shore. That side is

1809.
April
Friday 30. indeed very low and marshy, with mud banks lying along it; and we had difficulty in finding a dry place to pitch the tent, and still more to procure wood wherewith to cook the ducks I had shot upon the banks.

May.
Saturday 1.

At day dawn I set off with three of the boat's crew, for the highest part of the back hills called *Station Peak*. Our way was over a low plain, where the water appeared frequently to lodge; it was covered with small-bladed grass, but almost destitute of wood, and the soil was clayey and shallow. One or two miles before arriving at the feet of the hills, we entered a wood where an emu and a kangaroo were seen at a distance; and the top of the peak was reached at ten o'clock. My position was then $21'$ of latitude from Point Nepean, in the direction of N. $28^{\circ} 30'$ W., and I saw the water of the port as far as N. 75° E., at the distance of seven or eight leagues; so that the whole extent of the port, north and south, is at least thirty miles. The extremity of the western arm bore S. $15^{\circ} 45'$ W., which makes the extent, east and west, to be thirty-six miles; but there was no communication with the sea on that side, nor did the western arm appear to be navigable beyond seven miles above where I had crossed it. Towards the interior there was a mountain bearing N. 11° E., eleven leagues distant; and so far the country was low, grassy, and very slightly covered with wood, presenting great facility to a traveller desirous of penetrating inland.

I left the ship's name on a scroll of paper, deposited in a small pile of stones upon the top of the peak; and at three in the afternoon reached the tent, much fatigued, having walked more than twenty miles without finding a drop of water. Mr. Lacy, the midshipman of the boat, had observed the latitude at the tent from an artificial horizon to be $38^{\circ} 2' 22''$; and Station Peak bore from thence N. 47° W.

In the evening we rowed back to Indented Head, and landed there soon after dark. Fires had been seen moving along the shore, but the people seemed to have fled; though we found two newly

erected huts with fires in them, and utensils which must have belonged to some of the people before seen, since there was boiled rice in one of the baskets. We took up our quarters here for the night, keeping a good watch; but nothing was seen of the Indians till we pushed off from the shore in the morning, when seven showed themselves upon a hill behind the huts. They ran down to examine their habitations, and finding every thing as they had left it, a little water excepted of which we were in want, they seemed satisfied; and for a short time three of them followed the boat.

1802.
May.
Saturday 1.

Sunday 2.

Along the north-east and east sides of Indented Head, I found the water to be shoal for nearly a mile off; but on approaching the entrance of what Mr. Murray called Swan Harbour, but which I have taken the liberty of converting into *Swan Pond*, it became somewhat deeper. Seeing swans there, I rowed into it after them, but found the place full of mud banks, and seldom more than three or four feet in depth. Three of the birds were caught; and at the south side of the entrance, upon the sandy peninsula, or island as it is when the tide is in, I shot some delicate teal, and found fresh water in small ponds.

The ship was lying about three miles within the mouth of the port, near to the south shore; and after I had taken bearings at two stations on the sandy peninsula, we steered a straight course for her, sounding all the way. It appeared that there was a passage up the port of a mile wide, between the middle banks and the western shore, with a depth in it from 3 to $4\frac{1}{2}$ fathoms. Off the western extremity of the banks I had $2\frac{1}{2}$ fathoms, and afterwards 5, 7, 4, 7, 8, 9, 9 to the ship.

Lieutenant Fowler had had a good deal of difficulty in getting back to the entrance of the port; owing in part to the western winds, and partly from the shoals, which do not seem to lie in any regular order. He had touched upon one of these, where there was ten feet on one side of the ship, and on the other, 5 fathoms. This seems to have been a more eastern part of the same shoal upon

1803.
May.
Sunday 2.

which we had before grounded; but no danger is to be feared from these banks to a flat-floored ship.

I find it very difficult to speak in general terms of Port Phillip. On the one hand it is capable of receiving and sheltering a larger fleet of ships than ever yet went to sea; whilst on the other, the entrance, in its whole width, is scarcely two miles, and nearly half of it is occupied by the rocks lying off Point Nepean, and by shoals on the opposite side. The depth in the remaining part varies from 6 to 12 fathoms; and this irregularity causes the strong tides, especially when running against the wind, to make breakers, in which small vessels should be careful of engaging themselves; and when a ship has passed the entrance, the middle shoals are a great obstacle to a free passage up the port. These shoals are met with at four miles directly from the entrance, and extend about ten miles to the east-south-east, parallel with the south shore; they do not seem, however, to be one connected mass, for I believe there are two or three deep openings in them, though we had not time to make an examination.

No runs of fresh water were seen in my excursions; but Mr. Charles Grimes, surveyor-general of New South Wales, afterwards found several, and in particular, a small river falling into the northern head of the port. Mr. Grimes was sent by governor King, in 1803, to walk round, and survey the harbour; and from his plan I have completed my chart of Port Phillip. The parts of the coast left unshaded are borrowed from him, and the soundings written at right angles are those of his companion, lieutenant Robbins.

The country surrounding Port Phillip has a pleasing, and in many parts a fertile appearance; and the sides of some of the hills and several of the vallies, are fit for agricultural purposes. It is in great measure a grassy country, and capable of supporting much cattle, though better calculated for sheep. To this general description there are probably several exceptions; and the southern peninsula, which is terminated by Point Nepean, forms one, the surface

there being mostly sandy, and the vegetation in many places, little better than brush-wood. Indented Head, at the northern part of the western peninsula, had an appearance particularly agreeable; the grass had been burned not long before, and had sprung up green and tender; the wood was so thinly scattered that one might see to a considerable distance; and the hills rose one over the other to a moderate elevation, but so gently, that a plough might every where be used. The vegetable soil is a little mixed with sand, but good, though probably not deep, as I judged by the small size of the trees.

The most common kinds of wood are the *casuarina* and *eucalyptus*, to which Mr. Grimes adds the *banksia*, *mimosa*, and some others; but the timber is rarely sound, and is not large.

Were a settlement to be made at Port Phillip, as doubtless there will be some time hereafter, the entrance could be easily defended; and it would not be difficult to establish a friendly intercourse with the natives, for they are acquainted with the effect of fire arms, and desirous of possessing many of our conveniences. I thought them more muscular than the men of King George's Sound; but, generally speaking, they differ in no essential particular from the other inhabitants of the South and East Coasts, except in language, which is dissimilar, if not altogether different to that of Port Jackson, and seemingly of King George's Sound also. I am not certain whether they have canoes, but none were seen.

In the woods are the kangaroo, the emu or cassowary, paroquets, and a variety of small birds; the mud banks are frequented by ducks and some black swans, and the shores by the usual sea fowl common in New South Wales. The range of the thermometer was between 61° and 67°; and the climate appeared to be as good and as agreeable as could well be desired in the month answering to November. In 1803, colonel Collins of the marines was sent out from England to make a new settlement in this country; but he quitted Port Phillip for the south end of Van Diemen's Land, pro-

1802.
May.

1802.
May.

bably from not finding fresh water for a colony sufficiently near to the entrance.

Point Nepean is in *latitude* $38^{\circ} 18'$ south. The *longitude* from twelve sets of distances taken by lieutenant Flinders in the port, and six others by me ten days before arriving, the particulars of which are given in Table V. of the Appendix to this volume, is $144^{\circ} 30\frac{1}{2}'$ east; but these observations being mostly on one side of the moon, the corrected longitude by time keepers, $144^{\circ} 38'$ east, is preferred.

No observations were taken in the port for the *variation* of the compass; but at seven leagues to the south-south-west of Point Nepean, azimuths gave $3^{\circ} 41'$ when the ship's head was at N.E. by E. $\frac{1}{2}$ E., and an amplitude at N. N. E. $\frac{1}{2}$ E., $6^{\circ} 48'$ east. The mean of these, corrected to the meridian, will be $7^{\circ} 30'$, or half a degree less than at King's Island; I therefore take the variation in Port Phillip to have been generally, 7° , though at some stations it seemed to have been no more than $6^{\circ} 30'$ east.

The rise of *tide* is inconsiderable in the upper parts of the port; near the entrance it is from three to six feet. By the swinging of the ship, which however varied at different anchorages, it appeared to be high water *two hours and a half* after the moon's passage; but at Point Nepean, the time of high water by the shore is said by Mr. Grimes to be only *one hour after* the moon. At Western Port, Mr. Bass found high water to take place half an hour after the moon's passage, and the tide to rise from ten to fourteen feet. This great increase, in a place so near, seems extraordinary; but may perhaps be accounted for by the meeting of the tides from two entrances, whilst Port Phillip has only one, and that very narrow,